



This cross-sectional view shows a semiconductor device. A substrate 170 is composed of a bottom layer 172 of oxide and a top layer 174' of nitride. A silicon fin (Si FIN) 202 is formed on the nitride layer. A gate structure is formed on the fin, consisting of a gate oxide 200, a gate nitride layer 212, and a gate stack 204. The gate stack includes a polysilicon layer (POLY-Si) 194' and a capping layer 208. A source/drain region 192' is formed in the substrate, and a source/drain contact 206 is formed on the gate stack. A nitride layer 190 is formed on the fin. A label 170 with an arrow points to the substrate.

FIG. 3J



FIG. 3K